

### **REMARKS**

The Office Action dated February 4, 2008, has been received and carefully noted. The following remarks are submitted as a full and complete response thereto.

In view of the above amendment to the claims, claims 1-15, 17, 19, 21-30, 32-40, and 42-73 are currently pending in the application, of which claims 1, 19, 32, 40, 51-53, 57, 60, 65, and 68-73 are independent claims. Claims 1-15, 17, 19, 21-30, 32-40, and 42-73 are respectfully submitted for consideration.

### **Finality of the Office Action is Improper**

Applicants respectfully submit that the Office Action was improperly designated "Final," and request that the finality of the Office Action be withdrawn. The rejection changed between the previous Office Action (mailed June 14, 2007) and the present Office Action (mailed February 4, 2008), but the response (filed November 14, 2007) to the previous Office Action did not include any amendments. Accordingly, the change in the rejection was not necessitate by Applicants' amendments, since Applicants did not submit amendments. Accordingly, it is respectfully submitted that the finality of the Office Action is improper, and it is respectfully requested that the finality of the Office Action be withdrawn.

### **Rejection for Obviousness over Holmes alone is Improper**

Claims 1-3, 14-15, 19, 21-22, 30-34, 40, 42-43, and 51-52 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,864,860 of Holmes in view of U.S. Patent No. 5,481,712 of Silver et al. (“Silver”). The Office Action took the position that Holmes discloses all of the features of independent claims 1, 19, 32, 40, and 51-52, except “communicate header information.” The Office Action asserted that it would have been obvious to modify Holmes’ system by “transmitting the well known header information,” because (according to the Office Action) “such of header information would make it possible to one having ordinary skill in the art to efficiently minimize the number of bits that would otherwise have to be transmitted in each network frame.” The Office Action referred to two patents as allegedly providing evidence that communicating header information is “well established in the art of communication for efficiently transmitting a limited size data frame over a digital communication network.” Applicants respectfully traverse this rejection.

Claim 1, upon which claims 2-15 and 17 depend, is directed to a method for header compression. The method includes communicating header information. The method also includes comparing a current item list containing a plurality of current items with a reference item list containing a plurality of reference items. The method further includes determining a type of classification based on the comparing of the items of the lists. The method additionally includes using the determined type of classification to control the communication and compression of the information.

Claim 19, upon which claims 21-30 depend, is directed to a method for header compression. The method includes classifying at least one item of a current list containing a plurality of items by comparing the current list with a reference list containing a plurality of items. The method also includes based upon the classifying of the at least one item of the current list, forming a compressed list including the at least one item. The method further includes transmitting the compressed list as a compressed header. The method additionally includes determining a type of classification based on the comparing.

Claim 32, upon which claims 33-39 depend, is directed to an apparatus including a processor configured to compare a current item list containing a plurality of current items with a reference item list containing a plurality of reference items. The processor is also configured to determine a type of classification based on the comparing of the items of the lists. The processor is further configured to communicate compressed information based upon the determined type of classification.

Claim 40, upon which claims 42-50 depend, is directed to an apparatus including a processor configured to classify at least one item of a current list containing a plurality of items by comparing the current list with a reference list containing a plurality of items. The processor is also configured, based upon the classifying of the at least one item of the current list, to form a compressed list including the at least one item. The apparatus further includes a transmitter configured to transmit the compressed list. The processor is configured to determine a type of classification based on the comparing.

Claim 51 is directed to an apparatus including comparing means for comparing a current item list containing a plurality of current items with a reference item list containing a plurality of reference items. The apparatus also includes determining means for determining a type of classification based on a comparing of the items of the lists. The apparatus further includes communicating means for communicating the compressed information based upon a determined type of classification.

Claim 52 is directed to an apparatus including classifying means for classifying at least one item of a current list containing a plurality of items. The apparatus also includes comparing means for comparing the current list with a reference list containing a plurality of items. The apparatus further includes forming means for, based upon the classifying of the at least one item of the current list, forming a compressed list including the at least one item. The apparatus additionally includes means for transmitting the compressed list. The classifying means is configured to classify based on a comparing of the current list with the reference list.

Applicants respectfully submit that the combination of Holmes and Silver fails to disclose or suggest all of the elements of any of the presently pending claims.

Holmes relates to compression of structured data. Specifically, as explained in columns 3-4, Holmes relates to data compression in the area of delimited text databases. For example, each row (or record) of data will contain a set of fields delimited from each other by a character. Holmes discloses comparing a field of a current record with a corresponding field of a previous record. Holmes suggests creating a compressed form of

the current record based on the current row. The compressed form of the current record is the same as the current record except that, if the contents of a field of the current record are identical to that of the corresponding field in the previous record, a single character (such as a ".") is used in place of the contents. When all of the fields have been compared and (if appropriate) compressed, the compressed form of the current record is passed to the client.

In other words, in Holmes, a token is sent if the contents in a current record match the contents in a previous record. Holmes appears to be designed for a situation involving structured data, not lists. For example, Holmes determines whether there is a match, as opposed to determining and encoding a difference. Holmes also does not appear to teach a mechanism for encoding the addition, removal, or change of an item.

As many of the previous Office Actions in the prosecution had correctly acknowledged, Holmes fails to disclose or suggest, "determin[ing] a type of classification based on said comparing and using the determined type to control how the information is communicated," as variously recited in each of the independent claims.

For example, independent claim 19 recites, among other things, "classifying at least one item of a current list containing a plurality of items by comparing the current list with a reference list containing a plurality of items." These features are not taught by Holmes. For example, Holmes' comparison is not performed as part of "classifying" as claimed. As illustrated in the specification of the present application at page 2, lines 14-15, the ordinary meaning of "classifying" is "determining a type of classification." For

example, the classification may be (but is not required to be) a classification as belonging to “one of plurality of transformation cases,” as illustrated in the specification of the present application at page 21, lines 19-20.

Furthermore, the way the claimed “item” can be classified by comparing lists of items does not precisely correspond to the way the “fields” of Holmes are compared. For example, Holmes identifies whether the contents of a field are the same in a current record as in a previous record, as shown in column 4, lines 39-53, of Holmes. As illustrated in claim 28 of the present application, however, an “item” is distinguishable from the “content of at least one item.”

The present Office Action, however, has taken a new (and incorrect) position regarding the disclosure of Holmes. This new and incorrect position is to assert that Holmes discloses, “determining a type of classification based on said comparing of the items of the lists.”

The Office Action asserted that Holmes addresses such features, because Holmes, according to the Office Action, “uses the matching data fields to modify the current record by a token indicating the match ... for the purpose of alleviating the cost of maintaining and replicating structure data.” Even assuming *arguendo* that the Office Action’s characterization of Holmes’ disclosure is correct, such teaching would not correspond to what is recited in the claims.

Specifically, the claims recite, for example, “determining a type of classification based on said comparing of the items of the list.” (claim 1) As discussed above, this is

not the same as simply substituting the content of an item in a list when the item is the same as a previous item, as discussed in Holmes. Thus, the alleged teaching of Holmes does not and cannot correspond to what is claimed.

The Office Action asserted that there is some similarity between the process of Holmes and the description provided in Applicants' specification at page 3, lines 2-5. Whether or not there are some similarities, there are real and important differences. Those differences are reflected in the claims, and specifically in features of the claims that are neither disclosed nor suggested in Holmes.

Furthermore, claim 1, for example, "using the determined type of classification to control the communication and compression of the information." The Office Action apparently referred the argument already addressed above, also to these features of the claims.

Even more clearly, however, Holmes does not disclose or suggest these features. Although arguably Holmes matching is used to compressed the data analyzed in Holmes, a determined type of classification is certainly not used "to control the communication of the information," as recited in claim 1, nor would it ever be in Holmes.

The Office Action appears to have recognized this shortcoming, and asserted that the communication of header information was well known. The claim, however, is not simply to communicating header information. The claim very specifically recites, "**using the determined type of classification to control the communication and compression of the information.**" (claim 1, emphasis added) Whether or not communicating header

information is old, there is no disclosure or suggestion in the art to use the content substitution technique of Holmes to “control the communication ... of the information.” Instead, the content substitution technique of Holmes only is directed to “compression of the information.” Thus, Holmes is clearly far more deficient with respect to the limitations of the presently pending claims, then the present Office Action has acknowledged.

A *prima facie* case of obviousness requires that all of the features of the claims be present in the prior art, and that the combination of those features in the prior would have been obvious. In this rejection, the first phase of the obviousness requirement is inadequate, because Holmes (and the remainder of the cited art) fails to disclose or suggest several features of the claims, including, for example, “determining a type of classification based on said comparing of the items of the list,” and “using the determined type of classification to control the communication and compression of the information.” Thus, the claims of the present application are *prima facie* non-obvious with respect to Holmes, and it is respectfully requested that the rejection of independent claims 1, 19, 32, 40, and 51-52 be withdrawn.

Claims 2-3, 14-15, 21-22, 30, 33-34, and 42-43 depend respectively from, and further limit claims 1, 19, 32, and 40. Thus, it is respectfully submitted that each of claims 2-3, 14-15, 21-22, 30, 33-34, and 42-43 recites subject matter that is neither disclosed nor suggested in the cited art. Claim 31 has been cancelled without prejudice



or disclaimer. It is, therefore, respectfully requested that the rejection of claims 2-3, 14-15, 21-22, 30-31, 33-34, and 42-43 be withdrawn.

Claims 4-13, 16-18, 23-29, 35-39, and 44-50 were rejected under 35 U.S.C. 103(a) as being unpatentable over Holmes in view of U.S. Patent No. 6,535,925 of Svanbro et al. (“Svanbro”). The Office Action took the position that certain further limitations of the rejected claims were not disclosed or suggested by Holmes. The Office Action, therefore, cited Svanbro to remedy the deficiencies of Holmes. Applicants respectfully traverse this rejection.

Claims 4-13, 16-18, 23-29, 34-39, and 44-50 depend from claims 1, 19, 32, and 40 respectively, and recite additional limitations. The impossibility of Holmes disclosing the combination of recitations in the claims is explained above. Svanbro aggravates the deficiencies of Holmes, because it does not provide teaching, motivation, or suggestion to make a modification of Holmes to arrive at the base features of the claims, or to make the further combination including Svanbro’s own teachings with those of Holmes.

Svanbro generally relates to packet header compression using division remainders. Specifically, in columns 5-8, Svanbro describes a header compression (Figure 3), time stamp compression (Figure 4), time stamp decompression (Figures 5 and 7), and header decompression (Figure 6). Svanbro recommends using convention header compression techniques augmented by separately compressing the time stamp. With regard to the time stamp compression, Svanbro teaches that advance knowledge obtained by empirical

observation can be used to reduce the number of bits needed to encode a relatively predictable time stamp in an application such as a real-time speech service.

Svanbro does not remedy the above-identified deficiencies of Holmes. Furthermore, Svanbro does not recommend itself as a modification to Holmes' system, but only motivates one of ordinary skill in the art to use Svanbro as such. The Office Action asserted that the motivation would be to "efficiently improving effect on the compression," but there is no rational or evidentiary connection between this assertion and the teachings of the references. Thus, it appears that the rejection is simply based on a conclusory assertion of obviousness. It is, therefore, respectfully submitted that the rejection is improper. Accordingly, it is respectfully requested that this rejection be withdrawn.

Additionally, the rejection appears to be erroneous, in that it cites to the allegedly withdrawn reference, "Silver," as asserted at item 3 of the Office Action. To the extent that Silver is being cited, the rejection is even more erroneous, in that there is clearly no reason to combine Silver with the other cited references.

With respect to the rejection of claims 16 and 18, since those claims have been cancelled without prejudice or disclaimer, the rejection is moot and should be withdrawn.


For the reasons set forth above, it is respectfully submitted that each of claims 1-15, 17, 19, 21-30, 32-40, and 42-73 recites subject matter that is useful, definite, and neither disclosed nor suggested in the cited art. It is, therefore, respectfully requested that

all of claims 1-15, 17, 19, 21-30, 32-40, and 42-73 be allowed, and that this application be passed to issuance.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, Applicants' undersigned representative at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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